

REMARKS

The present application includes claims 22-23 and 35-38, 40-41 and 43-49. Claims 45-49 are new. Claims 22 and 43-44 were amended. The amendment to claim 22 finds support at least on pages 21-22 of the application as filed. Particularly, the requirement that the data processing device is configured to generate a packet of digital data finds support at least in the last paragraph of page 21, which reads:

“By utilizing methods for digital data transmission, the electronic user device 100 may be utilized to output packets of data comprising a variety of details about the user device 100.”.

The requirement for a transmission circuitry adapted to modulate an audio signal with the packet of digital data and transmit the modulated audio signal through the audio output device, finds support at least in the last paragraph on page 21:

“digital data is modulated by utilizing Frequency Shift Keying (FSK) or coded as DTMF or other means, and then transmitted ...”

Exemplary apparatus for performing this task is shown in Fig. 1 (one or more of CPU 103, DAC 107, ADC 104, transducers 108 and 109).

Claims 43-44 were amended to match the language of amended claim 22.

New claim 45 finds support at least on page 20, lines 4-5. New claim 46 finds support at least on page 24, lines 13-16 and/or page 10, lines 1-2, 13-15 and page 11, lines 27-28.

Claim 47 corresponds to claim 22 and has the same sources of support. Claims 48-49 find support at least on page 22, lines 7-10.

Interview summary

Applicants thank the Examiner for the interviews of April 3, 2006 and April 20, 2006. In these interviews, the differences between transmission by an audio output device and transmission using RF were emphasized. In addition, the difference between analog and digital signals was discussed. The Examiner emphasized that signals are not patentable and that more structure is needed in the claims. While applicants are of the opinion that the claim had sufficient structure in its non-amended form, the claims were amended to further the application toward allowance. Two drafts were sent to the Examiner for review, these drafts are attached herewith. The Examiner's e-mail responses to these drafts are also attached herewith.

It is noted that the present amendment is slightly different from the amendments in the drafts.

In the interview of April 20, 2006, the Examiner suggested putting the "modulation" of claim 44 into claim 22 and stated that such an amendment may put the claim in form suitable for allowance. In addition, US patent 6,681,105 was brought up by the Examiner in the interview. Applicants respectfully note that this patent relates to cellular transmissions (which use RF) and does not suggest transmission of modulated audio signals.

Formal rejections

The drawings were objected for not showing the audio output, the ultrasound signal and the modulated signals. Applicants respectfully submit that these are not elements of the claim, but rather are the products of the operation of the data processing device and/or the transmission circuitry which are shown in Fig. 1 (CPU 103, DAC 107, ADC 104, transducers 108 and 109). Applicant further notes that Fig. 1 actually does show wavy lines which represent the transmitted signals and these lines should be sufficient to meet the requirements of 37 CFR 1.83(a) even if the signals should be shown.

The claims were objected for it being unclear whether the output is audio or a digital signal and how ultrasound can be generated by an audio output device. These issues were discussed in the interview of April 3, 2006 and are believed to have been clarified. Ultrasound is a sub-group of audio signals in which the audio signals are in a specific frequency range and therefore signals can be both ultrasound and audio signals. Digitally modulated audio signals are a sub group of audio signals in which the modulation is digital and therefore signals can be both audio signals and digitally modulated.

Rejections based on prior art

Claims 22, 23, 36-40 and 42-44 stand rejected under 35 USC 103(a) as being unpatentable over US patent 6,079,621 to Vardanyan et al. in view of US patent 4,677,657 to Negata et al.

Claim 41 stands rejected under 35 USC 103(a) as being unpatentable over US patent 6,079,621 to Vardanyan et al. in view of US patent 4,677,657 to Negata et al. and further in view of US patent 6,081,782 to Rabin.

Applicant respectfully traverses the rejection and states that the Examiner has not established a *prima facie* case of obviousness, as at least one limitation of claim 22 is not taught or suggested by Vardanyan or Negata.

Claim 22, as amended, requires transmission circuitry adapted to modulate an audio signal with a packet of digital data and transmit the modulated audio signal through an audio output device. This is not taught by either of Vardnyan or Negata.

As stated in the response to the previous office action, Vardanyan does not describe an audio output device and therefore does not suggest transmission circuitry adapted to transmit a modulated audio signal through an audio output device. Vardanyan uses the processing result to control access to the card and does not notify the result using an audio signal.

Negata (col. 2, lines 15-20) states that its output is provided as an analog signal and to this effect it is converted from digital to analog. Negata does not teach or suggest a transmission circuitry adapted to modulate an audio signal with a packet of digital data and transmit the modulated audio signal through an audio output device (see also col. 4, lines 5-7).

The dependent claims are allowable at least by virtue of their parent claim.

Conclusion

In view of the above remarks, applicant submits that the claims are patentable over the prior art. Allowance of the application is respectfully awaited. If, however, the Examiner is not convinced and the Examiner is of the opinion that a telephone conversation may forward the present application toward allowance, applicant respectfully requests that the Examiner call the undersigned at 1 (877) 428-5468. Please note that this is a direct *toll free* number in the US that is answered in the undersigned's Israel office. Israel is 7 hours ahead of Washington.

Respectfully submitted,
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